

# General

#### Title

Perioperative care: percentage of patients, aged 18 years and older, with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia, who receive aspirin 24 hours prior to anesthesia start time.

## Source(s)

American Society of Anesthesiologists (ASA). Post-anesthetic transfer of care: use of checklist or protocol for direct transfer of care from procedure room to intensive care unit (ICU). Schaumburg (IL): American Society of Anesthesiologists (ASA); 2015 Oct 1. 2 p.

#### Measure Domain

#### Primary Measure Domain

Clinical Quality Measures: Process

# Secondary Measure Domain

Does not apply to this measure

# **Brief Abstract**

## Description

This measure is used to assess the percentage of patients, aged 18 years and older, with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia, who receive aspirin 24 hours prior to anesthesia start time.

#### Rationale

Late stent thrombosis is a relatively rare but serious complication of stent placement, with an estimated case fatality rate of up to 45%. Multiple studies have shown that premature discontinuation of dual antiplatelet therapy is associated with increased risk of stent thrombosis in patients with drug-eluting stents. Late stent thrombosis, or thrombosis greater than 1 year after stent placement, is of particular concern for drug-eluting stents. This concern indicates a need for a longer course of dual antiplatelet therapy for patients with drug-eluting stents compared to those with bare metal stents.

Clinical Recommendation Statements:

The following evidence statements are quoted verbatim from the referenced clinical guidelines: American College of Cardiology and American Heart Association (ACC/AHA) recommendation:

In patients who have received drug-eluting coronary stents and who must undergo urgent surgical procedures that mandate the discontinuation of thienopyridine therapy, it is reasonable to continue aspirin if at all possible and restart the thienopyridine as soon as possible (Grines et al., 2007).

For patients treated with drug-eluting stents (DES) who are to undergo subsequent procedures that mandate discontinuation of thienopyridine therapy, aspirin should be continued if at all possible and the thienopyridine restarted as soon as possible after the procedure because of concerns about late-stent thrombosis.

#### Evidence for Rationale

American Society of Anesthesiologists (ASA). Perioperative use of aspirin for patients with drug-eluting coronary stents. Schaumburg (IL): American Society of Anesthesiologists (ASA); 2015 Oct 1. 2 p.

Grines CL, Bonow RO, Casey DE Jr, Gardner TJ, Lockhart PB, Moliterno DJ, O'Gara P, Whitlow P, American Heart Association, American College of Cardiology, Society for Cardiovascular Angiography and Interventions, American College of Surgeons, American Dental Association, American College of Physicians. Prevention of premature discontinuation of dual antiplatelet therapy in patients with coronary artery stents: a science adv. J Am Coll Cardiol. 2007 Feb 13;49(6):734-9. PubMed

#### Primary Health Components

Perioperative care; anesthesia; drug-eluting coronary stent; aspirin

# **Denominator Description**

All patients, aged 18 years and older, with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia

# **Numerator Description**

Patients who receive aspirin 24 hours prior to anesthesia start time (see the related "Numerator Inclusions/Exclusions" field)

# Evidence Supporting the Measure

# Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

# Additional Information Supporting Need for the Measure

Unspecified

## **Extent of Measure Testing**

Unspecified

## State of Use of the Measure

#### State of Use

Current routine use

#### **Current Use**

not defined yet

# Application of the Measure in its Current Use

#### Measurement Setting

Ambulatory Procedure/Imaging Center

Hospital Inpatient

**Hospital Outpatient** 

## Professionals Involved in Delivery of Health Services

not defined yet

# Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

## Statement of Acceptable Minimum Sample Size

Does not apply to this measure

# Target Population Age

Age greater than or equal to 18 years

# **Target Population Gender**

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Health and Well-being of Communities

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

#### IOM Care Need

Getting Better

Staying Healthy

#### **IOM Domain**

Effectiveness

**Timeliness** 

# Data Collection for the Measure

# Case Finding Period

Unspecified

# Denominator Sampling Frame

Patients associated with provider

# Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

#### **Denominator Time Window**

not defined yet

# Denominator Inclusions/Exclusions

#### Inclusions

All patients, aged 18 years and older, with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia

Exclusions

Unspecified

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Patients who receive\* aspirin 24 hours prior to anesthesia start time

\*Patient reports taking aspirin OR hospital staff administered aspirin.

Exclusions

Unspecified

## Numerator Search Strategy

Fixed time period or point in time

#### **Data Source**

Administrative clinical data

Registry data

# Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

# Computation of the Measure

# Measure Specifies Disaggregation

Does not apply to this measure

# Scoring

Rate/Proportion

#### Interpretation of Score

Desired value is a higher score

#### Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

# **Identifying Information**

## **Original Title**

Perioperative use of aspirin for patients with drug-eluting coronary stents.

#### Measure Collection Name

Perioperative Care

#### Submitter

American Society of Anesthesiologists - Medical Specialty Society

## Developer

American Society of Anesthesiologists - Medical Specialty Society

Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration

# Funding Source(s)

Unspecified

# Composition of the Group that Developed the Measure

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## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Oct

#### Measure Maintenance

Annually

#### Date of Next Anticipated Revision

2016 Nov

#### Measure Status

This is the current release of the measure.

# Measure Availability

Source available from the American Society of Anesthesiologists (ASA) Web site	
For more information, contact ASA at 1061 American Lane Schaumburg, IL 60173-4973	; Phone: 847-825-
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## **NQMC Status**

This NQMC summary was completed by ECRI Institute on March 23, 2016. The information was verified by the measure developer on April 26, 2016.

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## **Production**

# Source(s)

American Society of Anesthesiologists (ASA). Post-anesthetic transfer of care: use of checklist or protocol for direct transfer of care from procedure room to intensive care unit (ICU). Schaumburg (IL): American Society of Anesthesiologists (ASA); 2015 Oct 1. 2 p.

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